

Amendments to the CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (currently amended) A 2-part adhesive formulation comprising, in a first part, water, a surfactant which is a neutral or a basic surfactant or a combination thereof, and a protected alkylborane complex and, in a second part, an acrylic monomer and a trialkylborane-displacing initiator, wherein concentration of the surfactant in the first part of the formulation is in the range of from about 0.5 weight percent to 25 weight percent, based on weight of the surfactant, water, and protected alkylborane complex; and the concentration is sufficient to increase stability of the protected alkylborane complex in water.
2. (previously presented) The formulation of Claim 1 wherein the protected alkylborane complex is a trialkylborane-organonitrogen complex and the second part further includes an acrylic polymer as a thixotropic agent.
3. (original) The formulation of Claim 2 wherein the thixotropic agent is a poly(methyl methacrylate).
4. (original) The formulation of Claim 3 wherein the surfactant is a polyvinyl pyrrolidone, a polyetheramine, a polyethylene glycol, a polyethylene glycol-polypropylene glycol copolymer, a polyacrylamide, a hydroxycellulose, a polyvinyl alcohol, a polyacrylic acid salt, or a polymethacrylic acid salt, or a combination thereof.
5. (original) The formulation of Claim 3 wherein the second part of the formulation includes an acrylic monomer selected from the group consisting of hydroxyethyl acrylate, hydroxybutyl methacrylate, and methyl methacrylate; and a trialkylborane initiator selected from the group consisting of acrylic acid and methacrylic acid.

6. (original) The formulation of Claim 5 wherein the acrylic monomer includes methyl methacrylate and the trialkylborane initiator includes acrylic acid.
7. (currently amended) A 2-part adhesive formulation comprising, in a first part, water, a surfactant which is a neutral or a basic surfactant or a combination thereof, and a trialkylborane-organonitrogen complex and, in a second part, methyl methacrylate, a thixotropic agent, and a trialkylborane-displacing initiator selected from the group consisting of acrylic acid, methacrylic acid, and a 2-hydroxyalkyl acrylate, wherein concentration of the surfactant in the first part of the formulation is in the range of from about 0.5 weight percent to 25 weight percent, based on weight of the surfactant, water, and trialkylborane-organonitrogen complex; and the concentration is sufficient to increase stability of the trialkylborane-organonitrogen complex in water.
8. (original) The 2-part adhesive of Claim 7, which includes in either the first or second part or both a pigment, a dye, a filler, or an antioxidant, or a combination thereof.
9. (currently amended) A composition comprising water, a surfactant which is a neutral or a basic surfactant or a combination thereof, an acrylic monomer, a trialkylborane-displacing initiator, and a thixotropic agent, wherein the composition further includes a protected alkylborane complex and wherein concentration of the surfactant in the composition is in the range of from about 0.5 weight percent to 25 weight percent, based on weight of the surfactant, water, and protected alkylborane complex; and the concentration is sufficient to increase stability of the protected alkylborane complex in water.
10. (canceled).
11. (currently amended) The composition of Claim 10 Claim 9 wherein the protected alkylborane complex is a trialkylborane-organonitrogen complex.
12. (currently amended) The composition of Claim 10 Claim 9 which forms a cured adhesive.

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13. (currently amended) A method comprising the step of contacting a surfactant-stabilized aqueous dispersion of a trialkylborane-organonitrogen complex with an acrylic monomer and a trialkylborane-displacing initiator to form a curing acrylic-based adhesive, wherein the surfactant is a neutral or a basic surfactant or a combination thereof; and 2) applying the curing adhesive to a low surface energy substrate, wherein concentration of the surfactant in the surfactant-stabilized aqueous dispersion of the trialkylborane-organonitrogen complex is in the range of from about 0.5 weight percent to 25 weight percent, based on weight of the surfactant, water, and trialkylborane-organonitrogen complex; and the concentration is sufficient to increase stability of the trialkylborane-organonitrogen complex in water so that the curing adhesive can be applied to the low surface energy substrate to make an effective adhesive.
14. (original) The method of Claim 13 wherein steps 1) and 2) are carried out concomitantly.
15. (previously presented) The method of Claim 13 wherein the low surface energy substrate is selected from the group consisting of polyethylenes, polypropylenes, ethylene- α -olefin copolymers, hydrogenated polyisoprenes, polyvinylidene fluorides, polytetrafluoroethylenes, polyesters, polyamides, polyacetals, and polystyrenes.
16. (original) The method of claim 13 wherein the low surface energy substrate is an isotactic polypropylene.